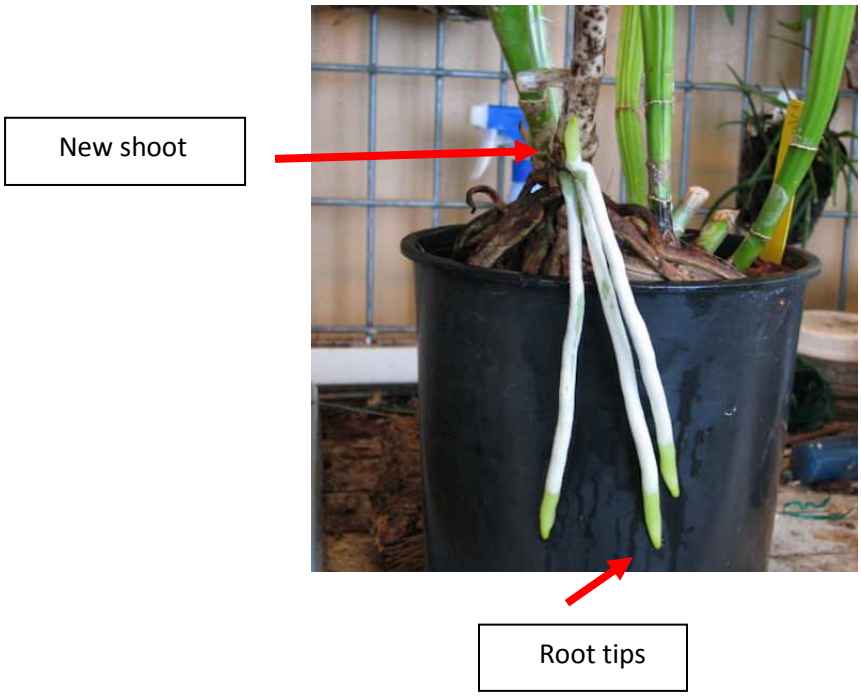
Potting Cattleya Orchids

The Cattleya alliance is a varied group of plants. Some species in this group send out a new shoot, then the roots and then bloom. Other species send out a new shoot, bloom and then the roots. The type pictured below sends out the roots, the shoot and then blooms but they all have one similarity, they only send out one set of roots for each shoot in their life time. The new roots have little green tips that are very sensitive to touch. If when re-potting, these roots are damaged the plant will suffer.



The life cycle has to be put into the equation when deciding when to re-pot. After a Cattleya orchid blooms it goes into a dormant stage. This dormant stage last about a month and then growth starts again, sending out the new roots or shoots depending on the species.

So when do you re-pot? The best time is right after it blooms and before the new growth starts. Most growers keep a chart as to when a particular plant blooms and will schedule the re-potting for the dormant period.

Sometimes there is a problem with new plants that have just arrived in your collection. If it is in need of re-potting you can check with the internet or other growers as to when it should bloom.

Removing the plant from the pot can be dangerous. Remove the plant gingerly, disturbing as few roots as possible. Clean off all old medium and any dead roots. Once all this is done there is still decaying, fine material attached to the roots. To remove this get a large basin

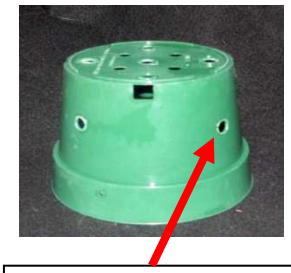
filled with warm water and immerse the roots and agitate until it's all gone. Doing this also softens the roots making it easier to put them back into a pot.

Next we want to address pots. Pots come in every shape and size possible and they can be made from plastic, clay or ceramic. Size is the easiest of the problems so we will look at size first. The pot has to be just big enough accommodate all the roots with a little extra for one year of growth.

Shape can be a problem, namely with drainage. More than one plant has died because it was put into a pot without adequate holes for the water to escape. A lot will depend on the bench the pot is sitting on. If the bench is flat wood not a mesh material, additional holes will have to be drilled. Clay pots may sometimes be fixed by grinding slots for the water.

Holes ground in side

Slots ground on bottom to help with drainage



Extra hole drilled in sides

Clay Pots: A moderately priced pot that comes in all sizes. The weight can help with stabilizing larger plants. On the negative side, in humid greenhouses watering and drainage can be a problem.

Ceramic Pots: This pot is the most expensive, but they are better looking and are nice for presentation. Again drainage can be a problem and these pots do not come in all sizes.

Plastic Pots: These are to most economical of all pots. Plastic will dry out faster than all the other pots. Weight is the only major problem. Being so light larger plants will have stabilizing problems.

Cattleyas have been potted in just about everything that people can find. For example in Canada most people use Fir Bark but others use Coconut Husks. In the U.S. I have seen pumice stone, Lava Rock and Clay Pellets. In the Dominican Republic gravel is used, so rather than recommend a medium we will deal with size.

Medium has two functions, holding water for the roots and promote air to circulate throughout the roots. Size depends on the thickness of the roots. Basically the larger the roots, the larger the medium. To help with the air circulation a non-porous inorganic filler should be used. A couple of examples are with fine mixes most growers use perlite and with larger mixes flat stone can be used. 25% filler is a good proportion. If Fir Bark is your choice of medium then the use of Charcoal needs to be addressed. Fir Bark starts to breaks down as soon as water has been added to the mix. Charcoal absorbs a wide range of organic compounds dissolved in gases and liquids thus extending the life of the medium. Charcoal should be flat and large in size. Round Charcoal can be found at hydroponic stores but if added to the fir will end up at the bottom of the pot instead of throughout the mix. Once you have selected your mix it has to be soaked for at least 2 hours prior to use. If dry mix is used it will draw moisture out of the roots which will stress the plant.

Medium Bark

Large Perlite

25 cent coin used for size comparison

Charcoal

Flat Stone

You have removed the plant with care, cleaned the old medium from the roots and soaked them in warm water. You have selected a pot and the medium that goes into that pot, it is time to finish the job.

Due to the forces of gravity the water in the pot will concentrate near the bottom of the pot. This will be harmful to the roots so most growers put a non-porous substance in the bottom of the pot. Today we will use Flat Stone.

Many growers use “peanuts” used in packing for shipment. These are harder to find now that the Post Office has stopped selling them. If you use them, use only the white ones because the dye used to colour them is harmful to plants. Cattleyas, because of their size flat stone or drainage rock works well.

Now you can put one or two hands full of mix in the bottom of the pot and in a twisting motion put the plant in the pot

The crown of the plant should be even with the top of the pot. Now you can add the remainder of mix making sure the crown stays above the mix

Do not forget to put the tag back into the pot.

You are just about finished. The plant needs to be stabilized while the roots find a home in the new mix. Most growers put a stake in the mix and tie the plant to this stake as pictured below.

Other growers use clips they have bent to the size of the pot. These clips will put pressure on the crown of the plant holding in position while the roots attaché themselves to the medium.

You are now finished